IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF DELAWARE

CAMBRIA COUNTY ASSOCIATION FOR THE BLIND AND HANDICAPPED, INC.,

Plaintiff,

V.

AFFORDABLE WIRE MANAGEMENT, LLC,

Defendant.

C.A. No.: 23-cv-80-SRF

JURY TRIAL DEMANDED

DEFENDANT AFFORDABLE WIRE MANAGEMENT, LLC'S OPENING BRIEF IN SUPPORT OF ITS MOTION FOR JUDGMENT ON THE PLEADINGS AS TO U.S. PATENT NO. 10,177,551

FARNAN LLP Dated: April 12, 2024

OF COUNSEL:

Andrew H. DeVoogd (pro hac vice) Williams S. Dixon (pro hac vice) Robert C. Sweeney (pro hac vice) MINTZ LEVIN COHN FERRIS GLOVSKY & POPEO PC

One Financial Center Boston, Massachusetts 02111 (617) 542-6000 DHDeVoogd@mintz.com WSDixon@mintz.com RCSweeney@mintz.com

Brian E. Farnan (Bar No. 4089) Michael J. Farnan (Bar No. 5165) 919 N. Market St., 12th Floor Wilmington, DE 19801 Phone: (302) 777-0300 BFarnan@farnanlaw.com MFarnan@farnanlaw.com

Attorneys for Defendant Affordable Wire Management, LLC

TABLE OF CONTENTS

	Page
I.	INTRODUCTION
II.	SUMMARY OF ARGUMENT
III.	FACTUAL BACKGROUND
A.	Electric Potential and Grounding2
B.	'551 Patent Background
C.	'551 Patent Claims5
IV.	LEGAL STANDARDS6
A.	Motion to Dismiss 12(c)6
В.	Patent Eligibility Is a Threshold Legal Issue Amenable to Early Resolution
V.	ARGUMENT8
A.	Alice Step One: The Claims Improperly Seek to Monopolize Electric Potential, the Law of Nature Underpinning Electrical Grounding9
В.	Alice Step Two: The Claims Lack an "Inventive Step" and Are Thus Invalid
	1. Claim 1 Only Applies Electric Potential to Generic, Conventional Prior Art Components
	2. The Prior Art Components Claimed by the '551 Patent Are Similarly Generic and Conventional
C.	Claim Construction Is Not Necessary to Resolve this Motion to Dismiss
VI.	CONCLUSION

TABLE OF AUTHORITIES

Pag	e(s)
Federal Cases	
Adams Pointe I, L.P. v. Tru-Flex Metal Hose Corp., No. 20-3528, 2021 U.S. App. LEXIS 24315 (3d Cir. Aug. 16, 2021)	, 10
Affinity Labs a/Texas, LLC v. DIRECTV, LLC, 838 F.3d 1253 (Fed. Cir. 2016)	8
Alice Corp. Pty. v. CLS Bank Intl, 573 U.S. 208 (2014)	8, 9
Am. Axle & Mfg. v. Neapco Holdings LLC, 967 F.3d 1285 (Fed. Cir. 2019) (Modified Jul. 31, 2020) (cert. denied) 	, 16
Berkheimer v. HP Inc., 881 F.3d 1360 (Fed. Cir. 2018)	8
Bilski v. Kappos, 561 U.S. 593 (2010)	2, 7
Cameron Septic Tank Co. v. Saratoga Springs, 159 F. 453 (2d. Cir. 1908)	1
ChromaDex, Inc. v. Elysium Health, Inc., 59 F.4th 1280 (Fed. Cir. 2023)	13
Content Extraction & Transmission LLC v. Wells Fargo Bank Nat'l Ass'n, 776 F.3d 1343 (Fed. Cir. 2014)	7
De Forest Radio Co. v. General Electric Co., 283 U. S. 664 (1931)	1
Dealertrack, Inc. v. Huber, 674 F.3d 1315 (Fed. Cir. 2012)	2
Diamond v. Diehr, 450 U.S. 175 (1981)	1
Dolbear v. Am. Bell Tel. Co., 126 U.S. 1 (1888)	1
Funk Brothers Seed Co. v. Kalo Inoculant Co. 333 U.S. 127, 130 (1948)	7. 9

Genetic Techs. Ltd. v. Lab. Corp. of Am. Holdings, Civil Action No. 12-1736-LPS-CJB, 2014 U.S. Dist. LEXIS 122780 (D. Del. Sep. 3, 2014)	10
Gottschalk v. Benjamin, 409 U.S. 63 (1972)	1, 13
In re Burlington Coat Factory Sec. Litig., 114 F.3d 1410 (3d Cir. 1997)	6
In re Simmons, 312 F.2d 821 (C.C.P.A. 1963)	3
Internet Patents Corp, v. Active Network, Inc., 790 F.3d 1343 (Fed. Cir. 2015)	8, 9
Le Roy v. Tatham, 55 U.S. 156 (1852)	1, 9
Mackay Radio & Tel. Co. v. Radio Corp., 306 U.S. 86 (1939)	1, 15
Mayo Collaborative Servs. v. Prometheus Labs., Inc., 566 U.S. 66 (2012)	2, 13, 14, 15
McRO, Inc. v. Bandai Namco Games Am. Inc., 837 F.3d 1299 (Fed. Cir. 2016)	8
Phillips v. AWH Corp., 415 F.3d 1303 (Fed. Cir. 2005)	17
Rapid Litig. Mgmt. Ltd. v. CellzDirect, Inc., 827 F.3d 1042 (Fed. Cir. 2016)	8
SAP Am., Inc. v. InvestPic, LLC, 898 F.3d 1161 (Fed. Cir. 2018)	7
Surgetech, LLC v. Uber Techs. Inc., No. 22-882-GBW, 2023 U.S. Dist. LEXIS 195960 (D. Del. Nov. 1, 2023) (Williams, J.)	6, 7
Trading Techs Int'l, Inc. v. IBG LLC, 921 F.3d 1378 (Fed. Cir. 2019)	9
Federal Statutes	
35 U.S.C. § 101	passim

Rules	
Fed. R. Civ. P. 12(c)	6, 7
Other Authorities	
Lipscomb, A. and Bergh, A., <i>The Writings of Thomas Jefferson</i> (Thomas Jefferson Memorial Association, 1905), available at https://founders.archives.gov/documents/Jefferson/03-06-02-0322	8

Pursuant to Federal Rule of Civil Procedure 12(c), Plaintiff Affordable Wire Management, LLC ("AWM") hereby moves for a judgment on the pleadings that U.S. Patent No. 10,177,551 ("'551 Patent"), asserted in this action by Defendant Cambria County Association for the Blind and Handicapped, Inc. ("CAB"), is unpatentable under Section 101 of Title 35.

I. INTRODUCTION

For well over a century, the Supreme Court has consistently held that patents cannot claim the "phenomena of nature" or "scientific truths." *Le Roy v. Tatham*, 55 U.S. 156 (1852); *Mackay Radio & Tel. Co. v. Radio Corp.*, 306 U.S. 86, 94 (1939) ("*Mackay*"); *Gottschalk v. Benjamin*, 409 U.S. 63, 67 (1972); *Diamond v. Diehr*, 450 U.S. 175, 185 (1981); *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 71 (2012). Contrary to this indisputable rule of law, the '551 Patent, titled "Grounding system," improperly purports to claim a monopoly over the scientific truth that electricity finds the path of least resistance to ground. But that subject matter is not eligible for patent protection. Extending patent rights over such "building blocks of human ingenuity" would "thwart the primary object" of the entire patent system: fostering innovation. *Alice Corp. Pty. v. CLS Bank Intl*, 573 U.S. 208, 217 (2014) ("*Alice*") (quoting U.S. Const., Art. I, cl. 8. (Congress "shall have Power ... to promote the Progress of Science and the Useful Arts.")).

As the Court in Funk Brothers Seed Co. v. Kalo Inoculant Co. put it in 1948:

The qualities of ... <u>electricity</u> ... are part of the storehouse of knowledge of all men. They are manifestations of laws of nature, <u>free to all men and reserved exclusively to none</u>. He who discovers a hitherto unknown phenomenon of nature has no claim to a monopoly of it which the law recognizes. If there is to be invention from such a discovery, it must come from the application of the law of nature to a new and useful end.

333 U.S. 127, 130 (1948) (emphasis added) (citing *Dolbear v. Am. Bell Tel. Co.*, 126 U.S. 1, 532-533 (1888)); *De Forest Radio Co. v. General Electric Co.*, 283 U. S. 664, 684-85 (1931); *Mackay*, 306 U. S. 86, 94; *Cameron Septic Tank Co. v. Saratoga Springs*, 159 F. 453, 462, 463 (2d. Cir.

1908). The '551 patent claims a monopoly over qualities of electricity—electric potential and grounding—that are fundamental building blocks of human ingenuity and parts of the storehouse of knowledge that is free to all. Accordingly, and pursuant to Fed. R. Civ. P. 12(c), AWM respectfully moves for judgment on the pleadings that the Asserted Claims of the '551 Patent are ineligible for patent protection under 35 U.S.C. § 101.

II. SUMMARY OF ARGUMENT

- 1. The Court is entitled to determine patent eligibility on the pleadings because patent eligibility under Section 101 is a threshold legal issue, and there are no factual disputes to resolve. *See Bilski v. Kappos*, 561 U.S. 593, 601 (2010) (patent eligibility Section 101 is a threshold legal issue); *Dealertrack, Inc. v. Huber*, 674 F.3d 1315, 1333 (Fed. Cir. 2012) (patent eligibility under Section 101 is a question of law).
- 2. The asserted claims of the '551 Patent do not claim eligible subject matter pursuant to 35 U.S.C. § 101 because they are directed to a law of nature/phenomena of nature and have no inventive step that might cure this lack of patentable subject matter. The '551 Patent purports to improperly monopolize the law of nature or natural phenomenon known as electric potential using nothing more than known prior art conductive components that support power lines.

III. FACTUAL BACKGROUND

A. Electric Potential and Grounding

Electric potential is the elementary natural phenomenon or law of nature that electrical current naturally moves from a higher potential (matter with excess electrons) to a lower potential (positively charged, or neutral matter) through a medium. Due to the law of electric potential, electrical current flows through the least resistive matter that provides a path to a positively charged or neutral point, where excess energy will dissipate. This is the genesis of the common figure of speech: "the path of least resistance."

A good example of this rudimentary principle in nature is when lighting strikes a tree. While trees are more resistive to electrical current than metal, they are still far more conductive than air. As a result, when lightning strikes, due to the fundamental phenomena of electric potential, the excess energy naturally flows through the least resistive matter available (a tree) to reach the earth, a neutral point, where the excess charge can dissipate.

"Electrical grounding" (or simply "grounding") is the process of removing excess electrical charge on an object by transferring electricity to another object. In practice, grounding simply means using the earth as the destination for the excess electrical charge so it may safely dissipate. As the Third Circuit Court of Appeals described this foundational scientific principle: "[g]rounding involves providing stray electrical current with a path toward the ground." *Adams Pointe I, L.P. v. Tru-Flex Metal Hose Corp.*, No. 20-3528, 2021 U.S. App. LEXIS 24315, at *3 (3d Cir. Aug. 16, 2021); *see also In re Simmons*, 312 F.2d 821, 823 (C.C.P.A. 1963) (providing "ground" as an example state of electrical potential).

The concept of grounding—which has been known since the late 1800s—hinges on the natural law of electric potential: stray electrical current has high potential and will naturally flow to the earth, which has a neutral potential. *Adams Point I, L.P.*, 2021 U.S. App. LEXIS 24315, at *3. In other words, grounding is nothing more than applying the scientific truth of electric potential.

B. '551 Patent Background

The '551 Patent issued on January 8, 2019 from an application filed on October 5, 2017, and is titled "Grounding System." D.I. 18-1. As admitted in the specification, it was long-known in the art that cables or wires carry electricity (or current) and span from where electricity is generated (e.g., power stations, solar panel arrays) to various locations where electricity is needed

(e.g., homes, businesses). D.I. 18-1, 1:17-19. The '551 Patent also acknowledges that such cable is conventionally supported using well-known "support assemblies" comprised of three principal components: (1) *utility poles or piles*, (2) *a messenger wire*, and (3) *cable hangers* that hold and support such cable. *Id.* at 1:19-23. The '551 Patent further acknowledges that these known and conventional main components are connected or "coupled" together. *Id.* 1:31-33.

The '551 Patent describes that prior art support assemblies "further include[] a *grounding conductor wire* that is disposed adjacent to the messenger wire and/or among the supported wires." *Id.* at 1:28-31 (emphases added). The specification elaborates that prior art systems provide a grounding wire so that stray electrical current can travel to the ground and dissipate. *Id.* The '551 Patent acknowledges that "regulations require that the grounding conductor be grounded at each pile" in a support assembly, which according to the '551 Patent, requires "splicing a conductor... into the grounding conductor and coupling [the conductor] to a grounding cable or ... to each pile." *Id.* 2:4-10. The '551 Patent states this splicing process is "difficult, time consuming and expensive." *Id.* 2:12-16.

The '551 Patent's purported solution to the splicing process is the sole alleged inventive concept in the patent: doing away with a separate grounding conductor. *Id.* at 2:24-35. Instead, the grounding system described in the '551 Patent uses the pathway to ground created by conventional components—the messenger wire, mounting assembly, and piles. In this configuration, stray electrical current, caused by lightning or otherwise, flows through the messenger wire, to the mounting assembly, to the pile and then to the earth where it dissipates. To accomplish this, the '551 Patent purports to replace a conventional messenger wire with a "multi-function line," defined as "a tension member that supports current wires and/or cable hangers, and, which is

conductive." *Id.* 2:37-40. The multi-function line "supports the cable hangers, *as a messenger wire*, and provides a current path, as a grounding conductor." *Id.* at 35-37 (emphasis added).

C. '551 Patent Claims

The '551 Patent has 19 claims, including independent Claims 1 and 19. Exemplary Claim 1 of the '551 Patent states:

- 1. A grounding system structured to ground a number of cables supported by a support assembly, said support assembly including a plurality of spaced, conductive piles, said grounding system comprising:
 - [a] a multi-function line assembly including a multi-function line;
 - [b] a number of conductive mounting assemblies, each said conductive mounting assembly structured to be coupled to said multi-function line and to a conductive pile; and
 - [c] wherein said multi-function line assembly is coupled to, and in electrical communication with, said number of conductive mounting assemblies.

Claim 1 thus requires (1) a grounding system, (2) comprised of conductive components coupled together in "electrical communication." Claims 2-18 depend from Claim 1 and offer nothing more than additional conductive components.

Independent Claim 19 differs from Claim 1 only in that it calls for additional conductive components on a mounting assembly, i.e., the component used to secure a messenger wire to a utility pole:

- 19. A mounting assembly for a grounding system structured to ground a number of cables supported by a support assembly, said support assembly including a plurality of spaced, conductive piles, said grounding system including a multi-function line assembly with a multi-function line, said mounting assembly comprising:
 - [a] a mounting body, a support coupling, and a number of multi-function line couplings;
 - [b] each said multi-function line couplings structured to be coupled to said multi-function line;
 - [c] each said support coupling structured to be coupled to a conductive pile;

and

[d] wherein, when said multi-function line assembly is coupled to, and in electrical communication with said multi-function line couplings, each said multi-function line coupling defines a conductive path.

The deficiencies of Claim 1 exemplify the deficiencies of every claim in the patent. Accordingly, Claims 2-19 are invalid as unpatentable under Section 101 for the same reasons that Claim 1 fails.

IV. LEGAL STANDARDS

A. Motion to Dismiss 12(c)

Pursuant to Rule 12(c) of the Federal Rules of Civil Procedure, a party may move for judgment on the pleadings "[a]fter pleadings are closed - but early enough not to delay trial." Fed. R. Civ. P. 12(c). When evaluating a motion for judgment on the pleadings, the Court must "view the facts presented in the pleadings and the inferences to be drawn therefrom in the light most favorable to the nonmoving party." Surgetech, LLC v. Uber Techs. Inc., No. 22-882-GBW, 2023 U.S. Dist. LEXIS 195960, at *5-6 (D. Del. Nov. 1, 2023) (Williams, J.) (quoting Rosenau v. Unifund Corp., 539 F.3d 218, 221 (3d Cir. 2008)). "The purpose of judgment on the pleadings is to dispose of claims where the material facts are undisputed and judgment can be entered on the competing pleadings and exhibits thereto, and documents incorporated by reference." Id. (quoting Venetec Int'l, Inc. v. Nexus Med., LLC, 541 F. Supp. 2d 612, 617 (D. Del. 2008)); see In re Burlington Coat Factory Sec. Litig., 114 F.3d 1410, 1426 (3d Cir. 1997) (explaining that any documents integral to pleadings may be considered in connection with Rule 12(c) motion). A motion for judgment on the pleadings can be granted "only if no relief could be afforded under any set of facts that could be proved." *Id.* (quoting *Turbe v. Gov't of Virgin Islands*, 938 F.2d 427, 428 (3d Cir. 1991)).

B. Patent Eligibility Is a Threshold Legal Issue Amenable to Early Resolution

Patentability under 35 U.S.C. § 101 is a threshold legal issue. *Bilski v. Kappos*, 561 U.S. 593, 602 (2010). Section 101 inquiries "may be, and frequently [have] been, resolved on a Rule 12(b)(6) or (c) motion." *SAP Am., Inc. v. InvestPic, LLC*, 898 F.3d 1161, 1166 (Fed. Cir. 2018); *see Surgetech, LLC*, 2023 U.S. Dist. LEXIS 195960, at *5-6 (Williams, J.) (ruling on Section 101 challenge to asserted patent under Fed. R. Civ. P. 12(c)). The court is not required to individually address claims not asserted or identified by the non-moving party, so long as the court identifies a representative claim and "all the claims are substantially similar and linked to the same abstract idea" or law of nature. *Content Extraction & Transmission LLC v. Wells Fargo Bank Nat'l Ass'n*, 776 F.3d 1343, 1348 (Fed. Cir. 2014) (internal quotation marks and citations omitted).

Section 101 of the Patent Act defines patent-eligible subject matter: "Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title." 35 U.S.C. § 101. The Supreme Court has long recognized three important exceptions to the subject matter eligibility requirements of § 101: laws of nature, physical phenomena, and abstract ideas. *Alice Corp. Pty. v. CLS Bank Intl*, 573 U.S. 208, 217 (2014). Retaining for the public these "basic tools of scientific and technological work," *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 71 (2012), is necessary because, as "part of the storehouse of [human] knowledge" they are "free to all men and reserved exclusively to none." *Funk Bros. Seed Co.*, 333 U.S. at 130 (citations omitted); *Bilski*, 561 U.S. at 602.

In *Alice*, the Supreme Court edified a two-step framework for distinguishing patents that claim ineligible subject matter from those that claim patent-eligible applications of those concepts. *Alice*, 573 U.S. at 217. At step one, "the claims are considered in their entirety to ascertain whether

their character as a whole is directed to excluded subject matter." *Internet Patents Corp, v. Active Network, Inc.*, 790 F.3d 1343, 1346 (Fed. Cir. 2015); *see also Affinity Labs a/Texas, LLC v. DIRECTV, LLC*, 838 F.3d 1253, 1257 (Fed. Cir. 2016) ("The 'abstract idea' step of the inquiry calls upon us to look at the 'focus of the claimed advance over the prior art' to determine if the claim's 'character as a whole' is directed to excluded subject matter."). "[I]t is not enough to merely identify a patent-ineligible concept underlying the claim; [courts] must determine whether that patent-ineligible concept is what the claim is 'directed to." *Rapid Litig. Mgmt. Ltd. v. CellzDirect, Inc.*, 827 F.3d 1042, 1050 (Fed. Cir. 2016).

At step two, the court must "look to both the claim as a whole and the individual claim elements" to determine whether they "amount[] to *significantly more* than a patent upon the [ineligible concept] itself." *McRO, Inc. v. Bandai Namco Games Am. Inc.*, 837 F.3d 1299, 1312 (Fed. Cir. 2016) (emphasis added). "Simply appending conventional steps [or elements], specified at a high level of generality, [is] not enough to supply an inventive concept." *Alice*, 573 U.S. at 222 (internal quotation marks omitted). Instead, the claim elements must "involve more than performance of 'well-understood, routine, [and] conventional activities previously known to the industry." *Berkheimer v. HP Inc.*, 881 F.3d 1360, 1367 (Fed. Cir. 2018) (citation and internal quotation marks omitted); *see also Mayo*, 566 U.S. at 73.

V. ARGUMENT

The patent system is intended to grant inventors a time-limited monopoly over their inventions in order to incentivize and reward innovation. Yet the grant of patent rights—rights of exclusivity that Jefferson called an "embarrassment" to the public 1—is carefully limited. In

¹ "Considering the exclusive right to invention as given not of natural right, but for the benefit of society, I know well the difficulty of drawing a line between the things which are worth to the public the embarrassment of an exclusive patent, and those which are not." T. Jefferson to I.

particular, for over a century the Supreme Court has zealously guarded for the public use and benefit the basic tools of science and innovation. *Le Roy v. Tatham*, 55 U.S. 156 (1852); *Funk Bros. Seed Co.*, 333 U.S. at 130.

In direct contravention of this bedrock law, though, the '551 Patent attempts to claim a monopoly over one of these basic tools of science: the rudimentary and well-known natural phenomena of electrical potential. Indeed, the claims as a whole are directed electrical grounding, which itself is merely the application of the law of nature or natural phenomena known as electric potential. The Asserted Claims claim a monopoly over using long-known and conventional prior art components in a power line support system applying the scientific truth of electric potential. They further lack any "inventive concept" sufficient to transform the claims into eligible subject matter. In other words, the '551 Patent is invalid under Section 101.

A. Alice Step One: The Claims Improperly Seek to Monopolize Electric Potential, the Law of Nature Underpinning Electrical Grounding

At step one of the Supreme Court's Section 101 test, "the claims are considered in their entirety to ascertain whether their character as a whole is directed to excluded subject matter." Internet Patents Corp, v. Active Network, Inc., 790 F.3d 1343, 1346 (Fed. Cir. 2015). To determine what a claim is "directed" to, courts look to the "focus of the claimed advance." See, e.g., Trading Techs Int'l, Inc. v. IBG LLC, 921 F.3d 1378, 1384 (Fed. Cir. 2019). On the whole, the focus and character of Claim 1 is indisputably electrical grounding. See, e.g., D.I. 18-1, Claim 1, preamble ("A grounding system . . ."). Electrical grounding is nothing more than an application of the law of nature or natural phenomenon known as electric potential. See, e.g., Adams Pointe I, L.P., 2021

9

McPherson, Writings 13:333-35 (Aug. 13, 1813) (sourced from Lipscomb, A. and Bergh, A., *The Writings of Thomas Jefferson* (Thomas Jefferson Memorial Association, 1905), available at https://founders.archives.gov/documents/Jefferson/03-06-02-0322.

U.S. App. LEXIS 24315, at *3 ("Grounding involves providing stray electrical current with a path toward the ground.").

A patent directed to a "law of nature" is broadly defined as "[a] patent that . . . describes a relationship that is the consequence of entirely natural processes[.]" *Genetic Techs. Ltd. v. Lab. Corp. of Am. Holdings*, Civil Action No. 12-1736-LPS-CJB, 2014 U.S. Dist. LEXIS 122780, at *29 (D. Del. Sep. 3, 2014) (brackets and quotations omitted) (quoting *Mayo*, 566 U.S. at 77). Electric potential dictates that an electrical charge will travel the path that has the least resistance—such as a path comprised of conductive matter—from the highest potential to the lowest potential, such as the ground where the charge will quickly dissipate and neutralize. Grounding systems, which "provide stray electrical current with a path toward the ground," *Adams Pointe I, L.P.*, 2021 U.S. App. LEXIS 24315, at *3, are the mere recognition and consequence of this natural phenomenon. Stray current naturally moves through a grounding system's interconnected conductive components toward the earth solely due to the natural law of electric potential. As the '551 Patent itself teaches, electric current moves through conductive material, including metals such as copper, steel, and aluminum, which is why these conductive materials are commonly used in electrical and grounding systems. D.I. 18-1, 8:18-28.

The grounding system of Claim 1 of the '551 Patent purports to monopolize the concept that stray current will pass through a conductive metal pathway to the earth. It is thus directed to nothing more than the foundational natural law and scientific truth of electric potential. Claim 1's grounding system comprises components made of conductive materials (e.g., metal) that, when coupled, comprise a system in "electrical communication" with the ground via conductive piles driven into the earth. D.I. 18-1, Claim 1. Specifically, Claim 1 of the '551 Patent teaches and claims nothing more than three conventional components in a well-known configuration:

a first piece of metal (a conductive "multi-function line") connected to a second piece of metal ("conductive mounting assemblies") connected to a third piece of metal ("conductive piles") driven into the earth, such that each component is "in electrical communication" and grounded.

Id. Accordingly, Claim 1 provides a conductive path, comprised of conventional and preexisting components, for the scientific truth of electric potential to take its course.

The Federal Circuit's recent holding in *American Axle* is instructive, if not dispositive. *Am. Axle & Mfg. v. Neapco Holdings LLC*, 967 F.3d 1285, 1301 (Fed. Cir. 2019) (Modified Jul. 31, 2020) (cert. denied) ("*American Axle*"). In *American Axle*, the Federal Circuit reviewed former Chief Judge Stark's assessment of the patent eligibility of a manufacturing method for driveline prop shafts that contain a liner designed to attenuate two modes of vibration simultaneously. The Court first looked to the "focus of the claimed advance" and found that the claimed processes required use of a natural law, Hooke's law, which relates frequency to mass and stiffness and that the exemplary claim described a desired result. *Id.* at 1292-93.

While the patent owner asserted that it had improved on a process for implementing the underlying natural law, neither the specifics of any novel computer modeling, nor the specifics of any experimental modal analysis were present in the claim. *Id.* at 1294-95. Instead, the claims were simply directed to the concept of achieving a result by whatever structures or steps happened to work. *Id.* at 1295. In other words, the Court found that the claim amounted to patenting a result involving the application of a natural law *without* limiting the claim to particular methods of achieving that result. *Id.*

The same is true here. Like in *American Axle*, the "focus of the claimed advance" in the '551 Patent is a natural phenomenon. While the patent at issue in *American Axle* claimed the use

of Hooke's law to tune an axle liner, the '551 Patent claims the use of the law of electric potential to ground stray electrical current. Just like the claims in *American Axle*, the '551 Patent claims do not on their face identify particular components, or improvements to those components, used to achieve their claimed results. *American Axle* at 1294. For example, the particular shape, material, or organization of the well-known components in Claim 1 are not relevant to exploiting electric potential ("A grounding system . . . comprising [components] in electrical communication[.]"). Claim 1 does not limit itself to particular novel components to achieve a grounding system. Instead, the patent leaves these details open, directing itself solely to using the natural phenomenon of electric potential to achieve a grounding system via conventional components in electrical communication.

The '551 Patent claims do not expressly recite "electric potential" and instead make cursory allusions to this natural phenomenon by referencing grounding, conductivity, and electrical communication. As explained, however, in *American Axle*, "nothing in *Mayo* or any other cases suggests that the natural law exception requires an express claim recitation of a natural law" and rather "the analysis is a substantive one about whether the claim is 'directed to' ineligible matter[.]" *American Axle* at 1301, citing *Alice*, 573 U.S. at 217-18 and *Mayo*, 566 U.S. at 72-73, 77. Like in *American Axle*, where Hooke's law was not expressly claimed, the language of the claim itself, as here, was sufficiently directed to the underlying natural law. *Id.* at 1301-1302. Just as in *American Axle*, where the claims lacked any explanation of how the natural law can be implemented in an inventive way, *id.*, the same deficiency is present here.

Dependent claims 2-19 are part and parcel of the improper attempt to monopolize the scientific truth of electric potential in a grounding system with components in electrical communication due to the conductivity of the various conventional components claimed. In other

words, none of these other claims do anything to alter or cure the fatal defects of Claim 1. Thus, all the '551 Patent claims are directed to a law of nature.

B. Alice Step Two: The Claims Lack an "Inventive Step" and Are Thus Invalid

As explained by the Supreme Court, ""[p]henomena of nature . . . are not patentable, as they are the basic tools of scientific and technological work." *Mayo*, 566 U.S. at 71 (quoting *Gottschalk v. Benson*, 409 U.S. 63, 67 (1972)). "[T]o transform an unpatentable law of nature into a patent-eligible *application* of such a law, one must do more than simply state the law of nature while adding the words 'apply it." *Id.* at 72 (emphases in original). Limitations in a claimed invention that are "apart from the natural laws themselves," involving only "well-understood, routine, conventional activity previously engaged in by researchers in the field," do not cure the defect. *Id.* at 73. Similarly, purely "conventional or obvious" "[pre]-solution activity" is "not sufficient to transform an unpatentable law of nature into a patent-eligible application of such a law," *Id.* at 79.

1. Claim 1 Only Applies Electric Potential to Generic, Conventional Prior Art Components

Claim 1 as a whole, and its individual elements, is devoid of any inventive concept that transforms the scientific truth of electric potential into a patent-eligible application of that natural phenomenon. *Mayo*, 566 U.S. at 72; *ChromaDex, Inc. v. Elysium Health, Inc.*, 59 F.4th 1280, 1286 (Fed. Cir. 2023) ("But merely recognizing the utility of [the natural phenomenon] is nothing more than recognizing a natural phenomenon, which is not inventive."). Rather, the '551 Patent simply instructs one to apply the law of electric potential with well-understood, routine, and conventional conductive components.

Tellingly, the '551 Patent acknowledges that each component recited in Claim 1 was previously known in the relevant art. For example, the '551 Patent admits in its background

discussion of the prior art that current-carrying cables are usually "supported by a support assembly including a number of poles or *piles*, ... a messenger wire, and a number of cable hangers." D.I. 18-1, 1:19-23 (emphasis added). The '551 Patent further admits that conventional messenger wires are akin to the claimed "multi-function lines" at least because both support current-carrying cables and messenger wires are made from conductive materials. *Id.* at 2:38-40 ("as used herein, a 'multi-function line' means a tension member that supports current wires and/or cable hangers, and, which is conductive"); 2:35-37 ("That is, a single multi-function line supports the cable hangers, as a messenger wire, and provides a current path, as a grounding conductor"); 1:60-2:2 ("there are instances wherein the messenger wire does carry a current ... [f]or example, lightning is known to strike messenger wires"); 8:49-55 ("the multi-function line 35 is structured to conduct electricity when needed but not in the normal course of use ... one non-limiting example of when a multi-function line 35 is needed to conduct electricity includes an instance when the multi-function line 35 ... is struck by lightning") (all emphases added).

The specification further acknowledges that conductive piles were well known in the art and could be used to provide a ground path to earth for the current-carrying cable. *See* D.I. 18-1, 2:6-10 ("Presently, the grounding conductor is grounded by splicing a conductor, such as ... a copper wire into the grounding conductor and coupling the copper wire to a grounding cable, *or*, *if the piles are conductive*, to each pile[.]") (emphases added). In sum, the aggregate of Claim 1's elements merely (a) arrange generically described, conventional and long-known components used in prior art support assemblies and (b) claim the result of a "grounding system." That is "not sufficient to transform an unpatentable law of nature into a patent-eligible application of such a law." *Mayo*, 566 U.S. at 79.

The claim—and, by extension, the patent—is invalid under Section 101.

2. The Prior Art Components Claimed by the '551 Patent Are Similarly Generic and Conventional

"Claiming a result that involves application of a natural law without limiting the claim to particular methods of achieving the result runs headlong into the very problem repeatedly identified by the Supreme Court in its cases shaping eligibility analysis." *American Axle*, 967 F.3d at 1295 (citing *Mayo*, 566 U.S. at 71-73; *Parker v. Flook*, 437 U.S. 584, 590-95 (1978); *Mackay Radio & Telegraph Co. v. Radio Corp. of Am.*, 306 U.S. 86, 94-101 (1939); *O'Reilly v. Morse*, 56 U.S. (15 How.) 62, 112-17 (1853)). Due to the lack of any particular or novel arrangement of the known prior art components recited in the exemplary Claim 1, the '551 Patent improperly seeks to monopolize <u>any</u> electrical support assembly, with a grounding function, that is comprised of conductive components.

For example, like the ubiquitous electric power line aerial support system in any urban power grid, Claim 1 requires "a plurality of spaced, conductive piles." D.I. 18-1. The '551 Patent itself readily admits that the "conductive pile" support assemblies of the kind claimed existed in the existing prior art, e.g., conductive piles of the kind claimed, "include[d] a number of poles or piles" in the ground. D.I. 18-1 at 1:19-21; 2:3-10. The next component of Claim 1, "a multifunction line assembly including a multi-function line," as discussed, *supra*, is nothing more than a rebrand of the previously employed messenger wire—a conductive component through which charge can pass due to the natural law and scientific truth of electric potential. Just like the prior art support systems described by the '551 Patent ("[t]he messenger wire is coupled to the piles at an elevated location") (*Id.* at 1:31-32), Claim 1 requires the same. *Id.* at Claim 1; *Id.* at 4:11-15 ("As used herein, the statement that two or more parts or components are 'coupled' shall mean that the parts are joined or operate together either directly or indirectly[.]"). There is no patentable innovation with respect to this conventional element.

The same is true for the claim element "a number of conductive mounting assemblies . . . structured to be coupled to said multi-function line and to a conductive pile." This basic element merely describes a broadly generic and conventional manner to secure a messenger wire (or multi-function line) to a pile so that it remains in an elevated position. *Id.* 1:19-21; 2:3-10. The final element of the exemplary Claim 1 fares no better. It requires that the "multi-function line assembly is coupled to, and in electrical communication with, said number of conductive mounting assemblies" which merely acknowledges that, as a result of electric potential and conductivity, the interconnected conductive components are in "electrical communication."

Here again, the Federal Circuit's en banc opinion in *American Axle* is instructive—if not dispositive. There, the Court considered the patent owner's contention that the claim in question included numerous inventive concepts that were neither previously known, nor conventional or routine. *Am. Axle*, 967 F.3d at 1298. The Court rejected this argument finding that "no inventive concept" was disclosed and that allegedly inventive concepts "amount[ed] to no more than conventional pre-and post-solution activity." *Id.* at 1299. That is **precisely** the case here—and in fact is even worse for CAB. The '551 Patent is directed entirely to electrical grounding, a simple application of a natural phenomenon. It purports to achieve an uninspired application of a scientific truth with nothing more than "conventional pre-and post-solution activity," such as using rudimentary and well-known conductive components and arranging them in a known manner that, due to the natural phenomenon of electric potential, creates a path to ground. And the '551 Patent does not even require the arguably sophisticated design and implementation choices that were necessary to practice the unpatentable invention in *American Axle*. This does not, and cannot, a monopoly make.

The '551 Patent impermissibly purports to monopolize the natural phenomenon of electric

potential by failing to claim, teach, or suggest any inventive step. Consequently, it is invalid under

Section 101.

C. **Claim Construction Is Not Necessary to Resolve this Motion to Dismiss**

To the extent that CAB contends that the Court should proceed through the Markman

process before resolving this motion, no claim construction is required to conclude that the '551

Patent is invalid under Section 101. By its own teachings, the only claim term in the patent that is

not well-known to a layperson or used in the prior art is the fictitious "multi-function line"

element—a rebranded messenger wire—which the inventors expressly gave a special definition in

the specification as "a tension member that supports current wires and/or cable hangers, and, which

is conductive." *Id.* at 2:37-40; *see Phillips v. AWH Corp.*, 415 F.3d 1303, 1316 (Fed. Cir. 2005)

(When "the specification . . . reveals a special definition given to a claim term by the patentee that

differs from the meaning it would otherwise possess . . . the inventor's lexicography governs.").

This patentee lexicography makes clear that the claimed "multi-function line" is merely a

conventional conductive tension structure—long-used in the art—that only underscores the lack

of patentable subject matter of the '551 Patent.

VI. **CONCLUSION**

For the foregoing reasons, AWM respectfully requests that the Court enter judgment on

the pleadings with respect to CAB's claims of infringement as they relate to the '551 Patent under

Fed. R. Civ. P. 12(c).

Dated: April 12, 2024

Respectfully submitted,

FARNAN LLP

OF COUNSEL:

/s/ Brian E. Farnan

Andrew H. DeVoogd (pro hac vice)

Williams S. Dixon (pro hac vice)

Robert C. Sweeney (pro hac vice)

Brian E. Farnan (Bar No. 4089) Michael J. Farnan (Bar No. 5165)

919 N. Market St., 12th Floor

17

MINTZ LEVIN COHN FERRIS GLOVSKY & POPEO PC

One Financial Center Boston, Massachusetts 02111 (617) 542-6000 DHDeVoogd@mintz.com WSDixon@mintz.com RCSweeney@mintz.com Wilmington, DE 19801 Phone: (302) 777-0300 BFarnan@farnanlaw.com MFarnan@farnanlaw.com

Attorneys for Defendant Affordable Wire Management, LLC